

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A battery terminal structure for connecting a terminal provided with an electric wire with a stud bolt type battery post, comprising:

an adapter, having a cylindrical body which is screwed onto the battery post, and a flange portion formed ~~on-at~~ at a top portion of the cylindrical body to be clamped by a screwing tool;

a terminal body, including a substantially U-shaped adaptor fitting portion which accommodates the adapter screwed on the battery post therein, and a seat portion on which the terminal provided with the electric wire is fixed; and

a lever, including a cam portion and supported on the terminal body so as to be pivotable between a first position and a second position,

wherein a space in which the flange portion is capable of passing through is secured inside of the adaptor fitting portion when the lever is in the first position;

wherein the cam portion is abutted against an outer periphery of the cylindrical body of the adaptor so that the adaptor is retained between the cam portion and an inner face of the adaptor fitting portion, when the lever is in the second position; and

wherein the flange portion of the adaptor is engaged with overhangs a top end face of the adapter fitting portion of the terminal body.

2. (currently amended): The battery terminal structure as set forth in claim 1, wherein the flange portion of the adaptor has a hexagonal shape such that a dimension between opposite faces is at least identical with no less than an outer diameter of the cylindrical body of the adaptor.

3. (original): The battery terminal structure as set forth in claim 1, further comprising an engagement member, which provisionally retains the lever in at least one of the first position and the second position.

4. (original): The battery terminal structure as set forth in claim 1, further comprising an elastic member provided in either one of the lever or the terminal body for bringing the cam portion into an elastic contact with the adaptor.

5. (original): The battery terminal structure as set forth in claim 1, wherein the terminal body is made of a single metal plate.

6. (original): The battery terminal structure as set forth in claim 1, wherein a dimension between an outer side faces of the adaptor fitting portion is equal to a dimension between an outer side faces of the terminal body where the seat portion is provided.

7. (previously presented): The battery terminal structure as set forth in claim 1, wherein the terminal provided with the electric wire is fixed on the seat portion with a stud bolt and a nut; and

wherein the lever includes a through hole which accommodates the nut therein when the lever is in the second position.

8. (previously presented): A battery terminal structure for connecting a terminal provided with an electric wire with a stud bolt type battery post, comprising:

an adapter, having a cylindrical body which is screwed onto the battery post, and a flange portion formed on the cylindrical body to be clamped by a screwing tool;

a terminal body, including a substantially U-shaped adaptor fitting portion which accommodates the adapter screwed on the battery post therein, and a seat portion on which the terminal provided with the electric wire is fixed;

a lever, including a cam portion and supported on the terminal body so as to be pivotable between a first position and a second position; and

an engagement member, which provisionally retains the lever in at least one of the first position and the second position,

wherein a space in which the flange portion is capable of passing through is secured inside of the adaptor fitting portion when the lever is in the first position; and

wherein the cam portion is abutted against an outer periphery of the cylindrical body of the adaptor so that the adaptor is retained between the cam portion and an inner face of the adaptor fitting portion, when the lever is in the second position.

9. (original): The battery terminal structure as set forth in claim 8, wherein the engagement member includes a recessed portion formed on one of the terminal body and the lever, and a convex portion engaged with the recessed portion formed on the other of the terminal body and the lever.

10. (currently amended): The battery terminal structure as set forth in claim 8,
wherein a flange portion is formed ~~on-at~~ a top portion of the cylindrical body of the adaptor; and
wherein the flange portion is ~~engaged-with~~overhangs a top end face of the adaptor fitting portion of the terminal body.

11. (original): The battery terminal structure as set forth in claim 8, further comprising an elastic member provided in either one of the lever or the terminal body for bringing the cam portion into an elastic contact with the adaptor.

12. (original): The battery terminal structure as set forth in claim 8, wherein the terminal body is made of a single metal plate.

13. (original): The battery terminal structure as set forth in claim 8, wherein a dimension between an outer side faces of the adaptor fitting portion is equal to a dimension between an outer side faces of the terminal body where the seat portion is provided.

14. (previously presented): The battery terminal structure as set forth in claim 8, wherein the terminal provided with the electric wire is fixed on the seat portion with a stud bolt and a nut; and

wherein the lever includes a through hole which accommodates the nut therein when the lever is in the second position.

15. (previously presented): A battery terminal structure for connecting a terminal provided with an electric wire with a stud bolt type battery post, comprising:

an adapter, having a cylindrical body which is screwed onto the battery post, and a flange portion formed on the cylindrical body to be clamped by a screwing tool, -

a terminal body, including a substantially U-shaped adaptor fitting portion which accommodates the adapter screwed on the battery post therein, and a seat portion on which the terminal provided with the electric wire is fixed;

a lever, including a cam portion and supported on the terminal body so as to be pivotable between a first position and a second position; and

an elastic member provided in either one of the lever or the terminal body for bringing the cam portion into an elastic contact with the adaptor,

wherein a space in which the flange portion is capable of passing through is secured inside of the adaptor fitting portion when the lever is in the first position; and

wherein the cam portion is abutted against an outer periphery of the cylindrical body of the adaptor so that the adaptor is retained between the cam portion and an inner face of the adaptor fitting portion, when the lever is in the second position.

16. (original): The battery terminal structure as set forth in claim 15, wherein the elastic member is a plate spring which constitutes the cam portion of the lever.

17. (original): The battery terminal structure as set forth in claim 16, wherein the plate spring is extended along an outer periphery of the cam portion such that a first end portion of the plate spring is fixed on the lever member and a second end portion of the plate spring is movable retained at the cam portion.

18. (currently amended): The battery terminal structure as set forth in claim 15, wherein a flange portion is formed ~~on-at~~ a top portion of the cylindrical body of the adaptor; and wherein the flange portion ~~is engaged with~~overhangs a top end face of the adaptor fitting portion of the terminal body.

19. (original): The battery terminal structure as set forth in claim 15, further comprising an engagement member, which provisionally retains the lever in at least one of the first position and the second position.

20. (original): The battery terminal structure as set forth in claim 15, wherein the terminal body is made of a single metal plate.

21. (original): The battery terminal structure as set forth in claim 15, wherein a dimension between an outer side faces of the adaptor fitting portion is equal to a dimension between an outer side faces of the terminal body where the seat portion is provided.

22. (previously presented): The battery terminal structure as set forth in claim 15, wherein the terminal provided with the electric wire is fixed on the seat portion with a stud bolt and a nut; and

wherein the lever includes a through hole which accommodates the nut therein when the lever is in the second position.

23. (previously presented): A battery terminal structure for connecting a terminal provided with an electric wire with a stud bolt type battery post, comprising:

an adapter, having a cylindrical body which is screwed onto the battery post, and a flange portion formed on the cylindrical body to be clamped by a screwing tool;

a terminal body, including a substantially U-shaped adaptor fitting portion which accommodates the adapter screwed on the battery post therein, and a seat portion on which the terminal provided with the electric wire is fixed; and

a lever, including a cam portion and supported on the terminal body so as to be pivotable between a first position and a second position,

wherein a space in which the flange portion is capable of passing through is secured inside of the adaptor fitting portion when the lever is in the first position;

wherein the cam portion is abutted against an outer periphery of the cylindrical body of the adaptor so that the adaptor is retained between the cam portion and an inner face of the adaptor fitting portion, when the lever is in the second position;

wherein the terminal body is made of a single metal plate including a first portion which is bent in a thickness direction thereof to form the adaptor fitting portion, a second portion extended perpendicularly from a first end of the first portion, and a third portion extended perpendicularly from a second end of the first portion; and

wherein the second and third portions are bent so as to be overlapped with each other to form the seat portion.

24. (previously presented): The battery terminal as set forth in claim 23, wherein the terminal provided with the electric wire is fixed on the seat portion with a stud bolt inserted through a through hole formed in the seat portion and a nut screwed onto the stud bolt.

25. (original): The battery terminal as set forth in claim 24, wherein a retaining piece is integrally formed on either one of the second and third portions of the metal plate; and wherein the retaining piece is bent to form a retaining member which retains a head portion of the stud bolt.

26. (currently amended): The battery terminal structure as set forth in claim 23, wherein a flange portion is formed ~~on-at~~ a top portion of the cylindrical body of the adaptor; and

wherein the flange portion is ~~engaged with~~overhangs a top end face of the adaptor fitting portion of the terminal body.

27. (previously presented): The battery terminal structure as set forth in claim 23, further comprising an engagement member, which provisionally retains the lever in at least one of the first position and the second position.

28. (original): The battery terminal structure as set forth in claim 23, further comprising an elastic member provided in either one of the lever or the terminal body for bringing the cam portion into an elastic contact with the adaptor.

29. (original): The battery terminal structure as set forth in claim 23, wherein a dimension between an outer side faces of the adaptor fitting portion is equal to a dimension between an outer side faces of the terminal body where the seat portion is provided.

30. (original): The battery terminal structure as set forth in claim 24, wherein the lever includes a through hole which accommodates the nut therein when the lever is in the second position.

31. (previously presented): A battery terminal structure for connecting a terminal provided with an electric wire with a stud bolt type battery post, comprising:

an adapter, having a cylindrical body which is screwed onto the battery post, and a flange portion formed on the cylindrical body to be clamped by a screwing tool;

a terminal body, including a substantially U-shaped adaptor fitting portion which accommodates the adapter screwed on the battery post therein, and a seat portion on which the terminal provided with the electric wire is fixed; and

a lever, including a cam portion and supported on the terminal body so as to be pivotable between a first position and a second position,

wherein a space in which the flange portion is capable of passing through is secured inside of the adaptor fitting portion when the lever is in the first position;

wherein the cam portion is abutted against an outer periphery of the cylindrical body of the adaptor so that the adaptor is retained between the cam portion and an inner face of the adaptor fitting portion, when the lever is in the second position; and

wherein a dimension between an outer side faces of the adaptor fitting portion is equal to a dimension between an outer side faces of the terminal body where the seat portion is provided.

32. (currently amended): The battery terminal structure as set forth in claim 31,

wherein a flange portion is formed ~~on-at~~ a top portion of the cylindrical body of the adaptor; and

wherein the flange portion is engaged with overhangs a top end face of the adaptor fitting portion of the terminal body.

33. (original): The battery terminal structure as set forth in claim 31, further comprising an engagement member, which provisionally retains the lever in at least one of the first position and the second position.

34. (original): The battery terminal structure as set forth in claim 31, further comprising an elastic member provided in either one of the lever or the terminal body for bringing the cam portion into an elastic contact with the adaptor.

35. (original): The battery terminal structure as set forth in claim 31, wherein the terminal body is made of a single metal plate.

36. (previously presented): The battery terminal structure as set forth in claim 31, wherein the terminal provided with the electric wire is fixed on the seat portion with a stud bolt and a nut; and

wherein the lever includes a through hole which accommodates the nut therein when the lever is in the second position.

37. (previously presented): A battery terminal structure for connecting a terminal provided with an electric wire with a stud bolt type battery post, comprising:

an adapter, having a cylindrical body which is screwed onto the battery post, and a flange portion formed on the cylindrical body to be clamped by a screwing tool;

a terminal body, including a substantially U-shaped adaptor fitting portion which accommodates the adapter screwed on the battery post therein, and a seat portion on which the terminal provided with the electric wire is fixed; and

a lever, including a cam portion and supported on the terminal body so as to be pivotable between a first position and a second position,

wherein a space in which the flange portion is capable of passing through is secured inside of the adaptor fitting portion when the lever is in the first position;

wherein the cam portion is abutted against an outer periphery of the cylindrical body of the adaptor so that the adaptor is retained between the cam portion and an inner face of the adaptor fitting portion, when the lever is in the second position;

wherein the terminal provided with the electric wire is fixed on the seat portion with a stud bolt inserted through a through hole formed in the seat portion and a nut screwed onto the stud bolt; and

wherein the lever includes a through hole which accommodates the nut therein when the lever is in the second position.

38. (currently amended): The battery terminal structure as set forth in claim 37, wherein a flange portion is formed ~~on-at~~ a top portion of the cylindrical body of the adaptor; and wherein the flange portion ~~is engaged with~~overhangs a top end face of the adaptor fitting portion of the terminal body.

39. (original): The battery terminal structure as set forth in claim 37, further comprising an engagement member, which provisionally retains the lever in at least one of the first position and the second position.

40. (original): The battery terminal structure as set forth in claim 37, further comprising an elastic member provided in either one of the lever or the terminal body for bringing the cam portion into an elastic contact with the adaptor.

41. (original): The battery terminal structure as set forth in claim 37, wherein the terminal body is made of a single metal plate.

42. (original): The battery terminal structure as set forth in claim 37, wherein a dimension between an outer side faces of the adaptor fitting portion is equal to a dimension between an outer side faces of the terminal body where the seat portion is provided.

43. (currently amended): An adaptor attached to a stud bolt type battery post and fitted with a battery terminal, comprising:

a cylindrical body which is screwed onto the battery post and surrounds the battery post; and

a flange portion formed ~~on~~at a top portion of the cylindrical body to be clamped by a screwing tool,

wherein the flange portion ~~is engaged with~~overhangs a top end face of the battery terminal.

44. (currently amended): The adaptor as set forth in claim 43, wherein the flange portion has a hexagonal shape such that dimension between opposite faces is ~~at least identical~~
~~with no less than~~ an outer diameter of the cylindrical body.

45. (currently amended): A method of manufacturing a battery terminal which connects a terminal provided with an electric wire and a stud bolt type battery post, comprising the steps of:

providing a single metal plate including a first portion, a second portion extended perpendicularly from a first end of the first portion, and a third portion extended perpendicularly from a second end of the first portion;

bending the first portion into a substantially U-shape in a thickness direction thereof to form an adaptor fitting portion which accommodates an adaptor screwed onto the battery post in the U-shaped portiontherein; and

bending the second and third portions so as to be overlapped with each other to form a seat portion on which the terminal provided with the electric wire is fixed.

46. (new): The adaptor as set forth in claim 43, wherein the flange portion has a hexagonal shape such that a dimension between opposite faces is equal to or slightly greater than an outer diameter of the cylindrical body.